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ROCHESTER INSTITUTE OF TECHNOLOGY

A Thesis Submitted to the Faculty of
The College of Fine and Applied Arts
in Candidacy for the Degree of
MASTER OF FINE ARTS

SURFACE DESIGN COMBINING VARIOUS TECHNIQUES

BY

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Preface

From the early 1960's fiber artists started a movement of pure expression. The traditional styles which were functional in the past began to decline. There was a need for new concepts and directions through a revised method of designing.

During this period many fiber artists had the idea that fiber art should borrow the expression and concepts of modern art in order to enlarge on their creative directions. As a formative genre of modern art, fiber art has to have a relationship with the existing values of society, culture, and aesthetic values. Surface designers, as well as other artists, have worked with experimentation and creativity in fiber art, working singularly or in a combination of two or more works. Sometimes a series would develop using contemporary techniques along with traditional processes to enlarge their area of expression.

Today Fiber Art is undergoing a drastic and difficult period of distinct transition. In the future the potential to change away from the abstract is very possible. The attempt to continually change awareness and aesthetics is entirely based on the spirit of its craftsman.

Introduction

Since 1980's in fiber art , the most distinct issue to appear was the discord which existed due to the limits of expression, shortage of concepts and growing isolation from modern art.

There are many surface designers who try to express an idea through their instincts using new technique's. I have addressed this thesis with enthusiasm as a surface designer. My intention is to express the role and order in which fiber art has a value as art in a logical, aesthetic and philosophical way.

This thesis is divided into two parts: history and process. The history is written with regard the transition and change of times from functional craft to the pure expression of the nonfunctional. Even today, artists tend to use many traditional and basic methods -- such as batik, tie dye, and printing and contemporary techniques-- such as airbrush, heat transfer and machine embroidery. However, because these traditional techniques are not used in my works, I have omitted any from of expression not related directly to my studies and final pieces.

This thesis includes only the history of techniques such as computerized imaging and contemporary machine embroidery which were developed in my work. As much as possible, to avoid being subjective, I used historical backgrounds and quotation from art literature. However, due to the short period of the existence of

surface design, the background is not extensive. Many artist have successfully integrated many of the traditional and contemporary techniques into their surface designs.

The second part was written only to assist one in understanding the actual working process, the style of expression, and the meaning which was involved in the concept.

During the process, large and small works were produced to improve my style from the past. They were also made in a short time, so these works were not produced to show perfection and sense of refinement. It has given me a level of complexity and contentment, to the standpoint of creating something new and sophisticated from nothing.

Using surface design had several purposes: it was used to express computerized images and to show that images made with the computer have a value in art and textiles.

These works were made by combining various techniques, such as airbrush, dying, and painting which I have used before entering graduate school at the Rochester Institute of Technology. The techniques, contemporary embroidery and Cannon heat transfer printing which I learned from various fiber art books was used in my thesis works. These techniques combined showed me new directions to overcome the limited area of expression of surface design. I was delighted that It helped me to understand color, design,

various techniques and concepts in a way that communicates an awareness and a sensitivity of fiber art.

Historical Surface Design

Today fiber art is in line with the present and interconnected with modern art. Since the late 1800's, From about 1970 it has been pursued as pure art. The tendency of modern fiber art is to express surface design through methods in which we decorated fabrics by hand, with applications of design using dyes or pigments with various techniques.

Even though, artists have been dying fabric, painting warps, printing textiles, and embellishing cloth for centuries, it was not until the late 1960's that these techniques began to be collected under the term "surface design". In the traditional view craft art, it's history has been going on through many centuries.

From an early time, man could color cloth or garments. They were decorated by using all natural dyes which were obtained from their natural surroundings. The method of expression and were techniques traditional concepts inherited by craftsmen who faced one great transitional period in the middle 1800 century.

Due to the development of the textile industry it was possible to mass produce various fabrics for clothing materials, colored dyes and wood block techniques. Many fabric artist became concerned about industrial textiles, which is the basis of industrial textile design today.

On the other hand, products were of low quality and inferior techniques . For many people, this problem was both positive and negative. "In 1890, Fiber Art was started by a few craft artists, in particular in England, William Morris wanted traditional craft to be reproduced as art. This is similar to the flow from the Bauhaus which was founded as a special school to teach graphic art, crafts, and technique together. Fiber art started with these concepts from the 1890's and appeared with various forms in the expression from 1990 to 1950 ,60,70." ¹

Surface design has grown rapidly in the last several decades in fiber art. Artists who started the studio surface design movement in the 1950's and 60's were rebelling against designing functional fabrics within the confines of the textile industry. Instead, they began making one-of-a-kind works and displaying them in art galleries

The creative techniques from the past have been assimilated, each has led to the development of new fibers, dyes, and techniques. Today's surface design artists have a multitude of techniques at their disposal, including direct painting and dyeing ,

1. On-Mi, Bak, The Bauhaus From Origin of Modern Fiber Art (Seoul: Noon-Bich Co., 1994, 124

marbling, cyanotype, and heat transfer of images. They use various techniques in many combinations. Some concentrate on a single technique; other artists combine, cross over, embellish, and invent. Today's artists stretch beyond the limitations of technique, of materials, of the past. They test the dynamics of order and even flirt with chaos. They create a sophistication of color in a majority of their works with a highly competent technique.

(1) Color

The beginning of dye color used on fabric developed from plants, bugs, flowers and natural materials. By using natural dyes and mordants obtained in nature, the ancient people gradually used beautiful natural colors on their garments.

" The origin of fabric, 5000-6000 B.C. was discovered in 1962 by archaeologist James Mellart. The fabric was red colored linen, founded at the sight of Catal Huyuk in present-day Turkey. It was proven to be one of the earliest finds that man has used colored fabric.

The paleo-botanist working with Mellart speculated that red ocher, plentiful in the region, had supplied the pigment. Like that, it is easy to imagine how our ancestors might have stumbled upon the natural dyes themselves. The blue from indigo and woad, the red from madder root, blazed scarlet from kermes and cochneal, the murex purple from keen-eyed might be extracted. Also the mordants that make dyed cloth colorfast are conjectured to be found in the natural and close at hand, aluminum, salts from tea leaves, tannin acid from acorns and bark of oak, hemlock, and willow trees." ²

In 1856, in England W. H. Perkin developed the first chemical

2. Elaine Thompson, Chris Colando, *The Surface Designer's Art* (Asheville: Lark Books Co., 1993), 6.

dye-Mannue. He was trying to develop quinine but developed the first synthetic instead. The dye obtained from natural material have been replaced with synthetic chemical colors, which were developed from coal and other industrial materials.

Today, fiber artists work with the benefit of fluent colors without difficulty. They sometimes need natural colors as they can choose whether they use natural color or synthetic dye according to their work's character.

(2) Pattern/Design

The origins of pattern in textiles are equally obscure. People applied wax, vegetable pastes, or mud to block out dye and thus created patterns. This may have begun concurrently in Asia, India, and Africa. For example, " wall paintings that showed a group of women in patterned garments around 2000 B C were found in the tomb of a high-ranking Egyptian official. Another example, Frescoes, figurines, and vases of the same period from the Mediterranean Islands of Create, Thira, and Melos depicting women wearing sophisticated patterned clothing. Presuming from those patterned garments, dye resist techniques clearly were being used. " ³

We can guess that ancient people expressed old traditional dye resist techniques like tie-dye, Batik and printing techniques, even though, there is no proof as to where its originated. Those traditional techniques had been used for patterns on their garments and ornaments. From 1800, the pattern on the surface was produced for mass products by machine. Later there emerged another form newly developed in 1950 by surface designers, that is pure art. Today, the expression of surface design appears in three forms.

1. naturalism

3. Elaine Thompsion, Chris Colando, *The Surface Designer's Art* (Asheville :Lark Books Co., 1993), 6.

2. abstractism

3. subjective form

Surface designs are expressed in a new form by the surface designer's sensibility. Surface designers also have capitalized on history as well as contemporary notions about what a textile is and how one can deliberately show the process of a piece's development.

(3) Contemporary Machine Embroidery

Today, fiber artists produce their works using traditional techniques, innovative new techniques, or discover new methods and their own techniques. These fit their philosophical, aesthetic and physical needs for pure expression. Artists working at making marks on cloth with thread, stitching color, texture and structure, and embroidery is the essence of contemporary surface design.

It is an ancient craft, derived from the appreciation and repetition of a row of regularly worked stitches by one of our ancestors, binding skins together to make a garment. It has been extolled in many generations as the embodiment of fashion and the finest of gifts, for marriageable women in many cultures.

In the last 30 years, however, "embroidery in the United States and Canada has quietly kept pace with the changes in the art world. It tells the tendency of movement to unite embroidery with contemporary design. It started in England, where there was a much earlier movement to unite embroidery with contemporary design. An important influence on many embroideries in the United States and Canada was Constance Howard MBE, who was then principal lecturer at Goldsmiths' College School of Art in London. Her first book, "Inspiration for Embroidery" and then her lively presence challenged and encouraged us on this side of the Atlantic to explore and expand

our understanding of embroidery. As more and more people became acquainted with embroidery, the need for classes and workshops in technique and design developed. Schools and universities grew, many calling themselves 'guilds' after the traditional artisans' trade organization.

In the late 1970's and early 1980's, A few colleagues began to recognize embroidery within their home economics or art curriculums. These were exciting times for embroidery, ranging from the richly decorated hippie jeans and the exploratory, ropy, barely spun, fibrous "stitcheries" of the 1960's to the research laden, historic and ethnic oriented garments of the 1970s and 1980s. This was a time of recreating the medium, a simultaneous acknowledgment of the work of the past and an exploration of the new." 4

Many artists trained in other techniques have been drawn to embroidery. Some, particularly printmakers, discovered their philosophy, aesthetics and physical needs in other materials. Ultimately, they have begun to treat needle and thread in new ways, to connect previously unrelated materials and processes and to make their own rules as they progress.

4. Babara Lee Smith, Illinois, Celebrating The Stitch; Contemporary Embroidery of North America (Newtown, CT: The Taunton Press,1991)

(4) Computerized Image

Today, the computer is the most up-to-date technology, and is becoming more user friendly due to the development of various software.

The usage of computer in fiber art is due also to the development of textile software and printing techniques, There are also computerized knitting machines and pattern machines which can produce many traditional designs and patterns. These machines also have the capability of making knits which are too complex or fine for hand technique methods.

These machines are used in the production of commercial textiles in response to consumer demands with many new and exciting designs.

In my works of surface design, computerized images are different from the above characteristics. I produce my designs for pure expression . After designing the images which I want in photoshop software, I produce a heat transfer design which I adhere to cotton with heat. I have never used before this method and it has developed a new creative direction for me.

(5) Process and Material

Visual perspective is an interest which I've explored since I began working with fiber. I want to create the illusion of a three-dimensional space.

To obtain this illusion in my previous pieces, I set up a spatial situations by making tiny embroidered stitchies in varying shades and densities. This took many painstaking hours, I then switched to the airbrush to create a subtle or more vibrant color and hard or soft edges. While I lost the texture and "hand" of the seed stitching, the work was more spontaneous and I could create more pieces.

As my works progressed, I combined various techniques and tried to use each technique to its best advantage. Later, I developed various characteristics that are unique to this technique.

PROCESS

1. First wash 100% cotton with cool water, then dry completely and iron.
2. Stretch and put the cotton tightly over a rectangular wooden Frame secured with push pins on all sides.
3. Paint desired colors on the cotton without stains or streaks.
4. Print out a desired image created from photoshop software.
5. Put the computerized image on the Cannon heater in order to transfer it onto T-shirt paper.
6. Lay the transfer image T-shirt paper on 100% cotton fabric by ironing the desired transferred image on it. The dyed image of various colors create a 3-D illusion.
7. Make another print (if desired) from photoshop, and repeat 1 through 6.

8. Cut desired shapes and put them on the first transfer image where you want them to appear.
9. Using household items, masking tape, contact paper, or freezer paper to make stencils, then airbrush to create subtle or vibrant colors and hard or soft edge patterns on the fabric.
10. After completing the above, let 7 be re-arranged on number 8, make various collages by using embroidery. The embroidery is the line in my work. I draw with it to define, distort, or emphasize the design.

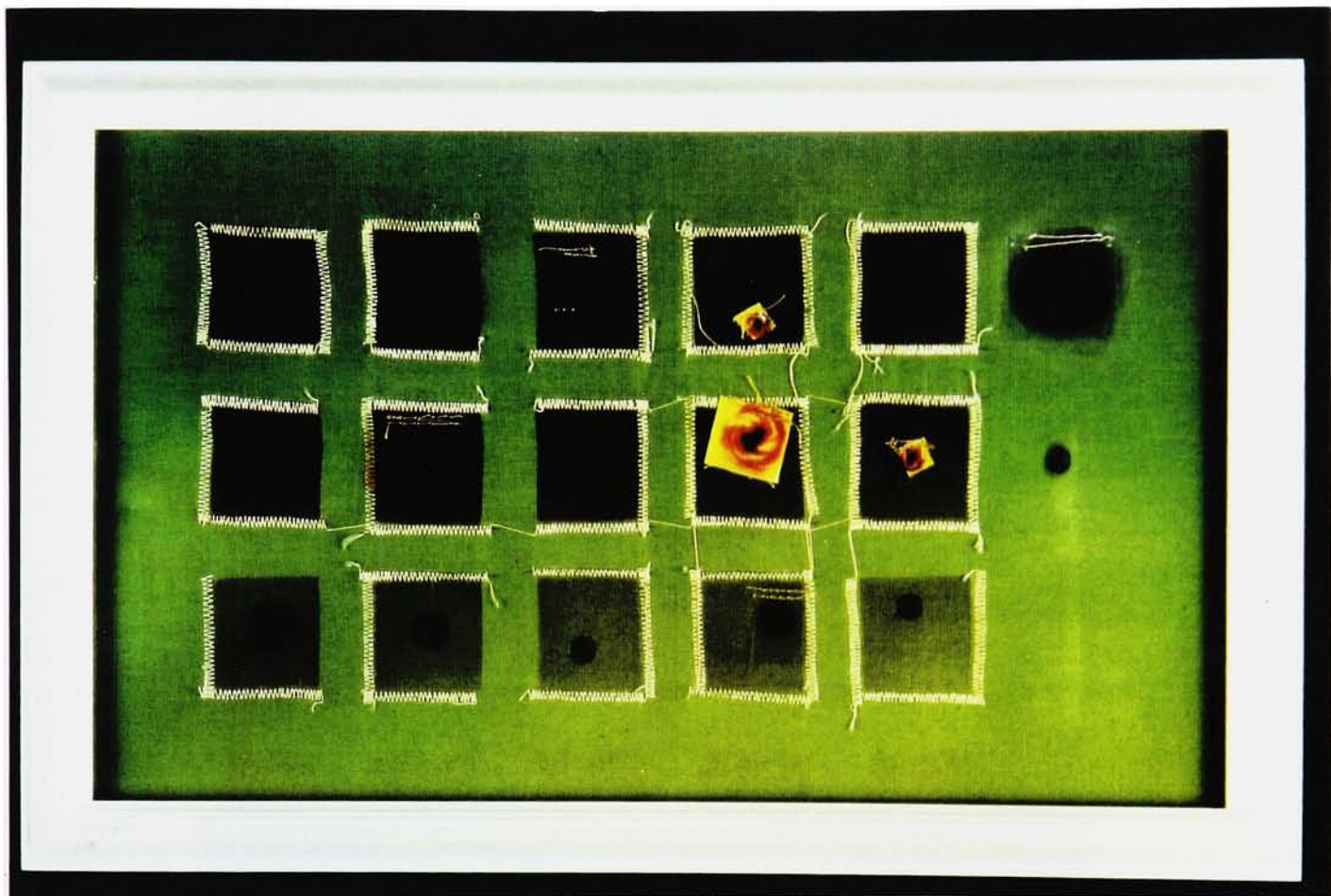
Though the making of textile artworks often involves intensive hours of discipline, there are many phases of play and satisfaction, both a sensual and intellectual enjoyment of the materials and the process.

(6) Design

I like the FOUR SEASONS. Perhaps, it is due to my growing up in a country with four seasons, Korea. The subject of my works are the rhythms of seasons in my mind. The rectangular small squares I see in my work, tells me lots of stories at different times. I have expressed one year to contain spring, summer, fall and winter. Without saying more, the style is abstract and geometrical. The style I use is based on the works of Mondrian and Kandinsky. They abandoned reference to representational subject matter, and were influenced by the abstract strategies of cubism

Enclosed are color xerox copies of my works created for my thesis:

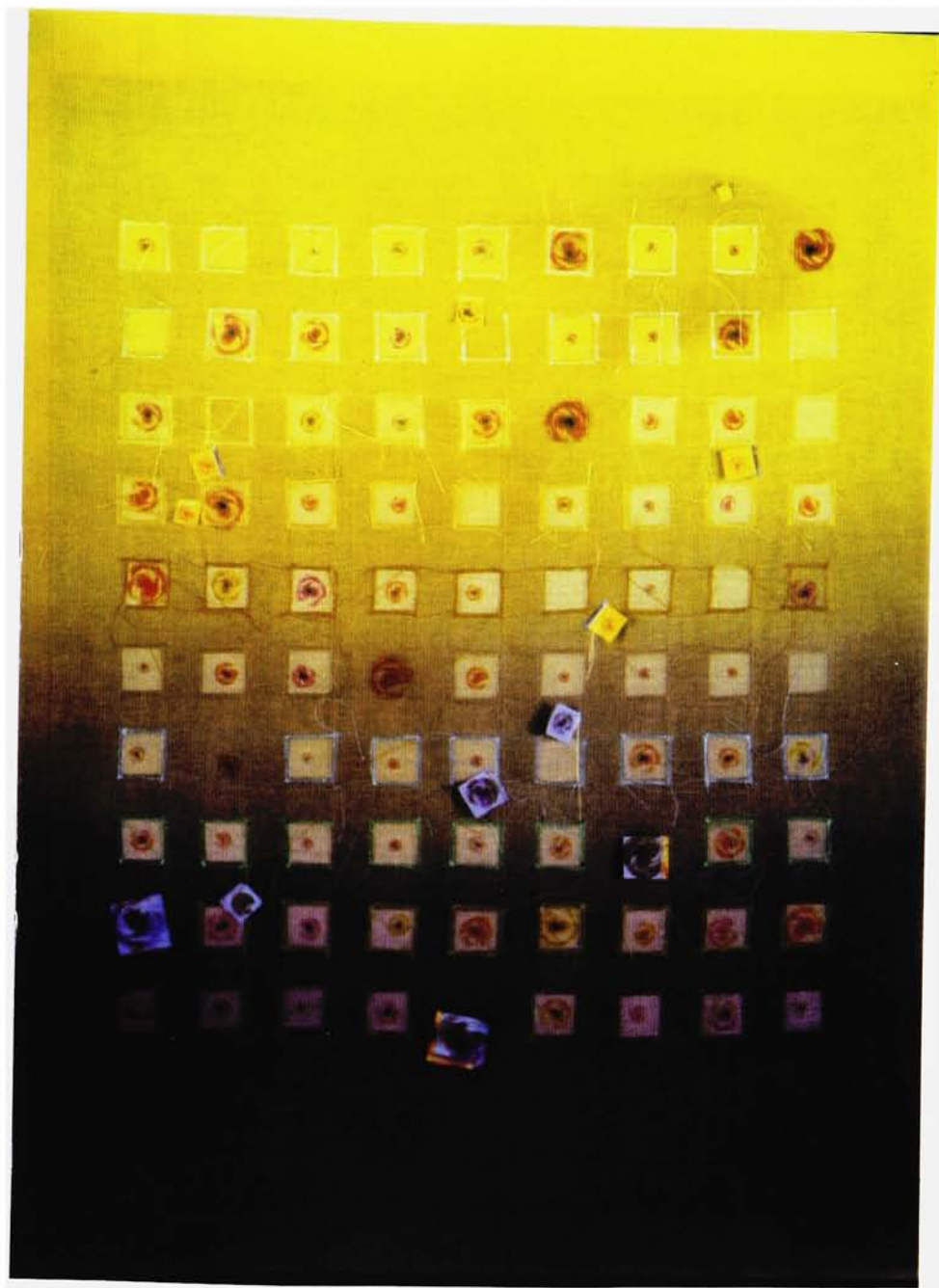
1. The rhythm of the spring season
2. The rhythm of the summer season
3. The rhythm of the fall season
4. The rhythm of the winter season
5. The rhythm of a winter morning
6. The rhythm of a raining day
7. The rhythm of summer sunset



1. The rhythm of the spring season



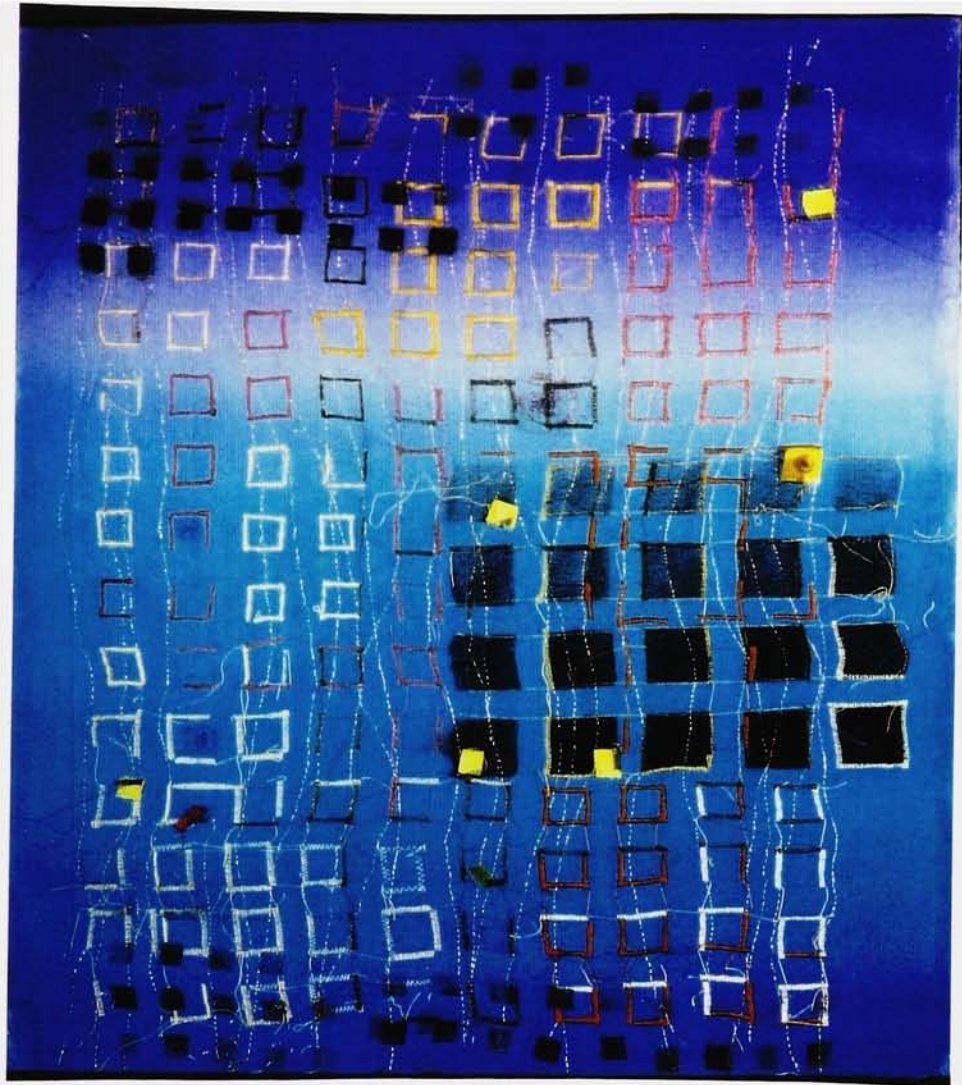
2. The rhythm of the summer season



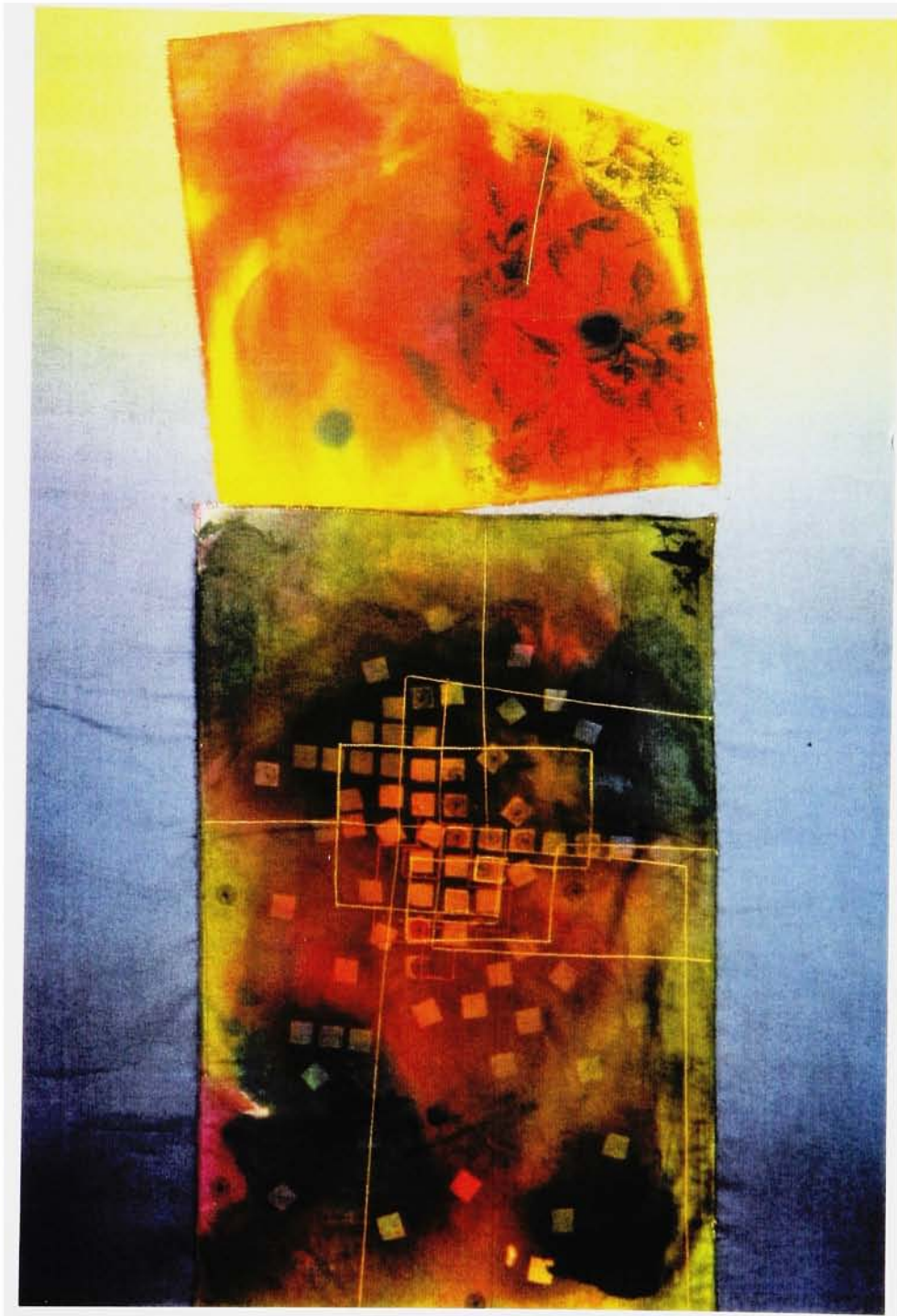
3. The rhythm of the fall season



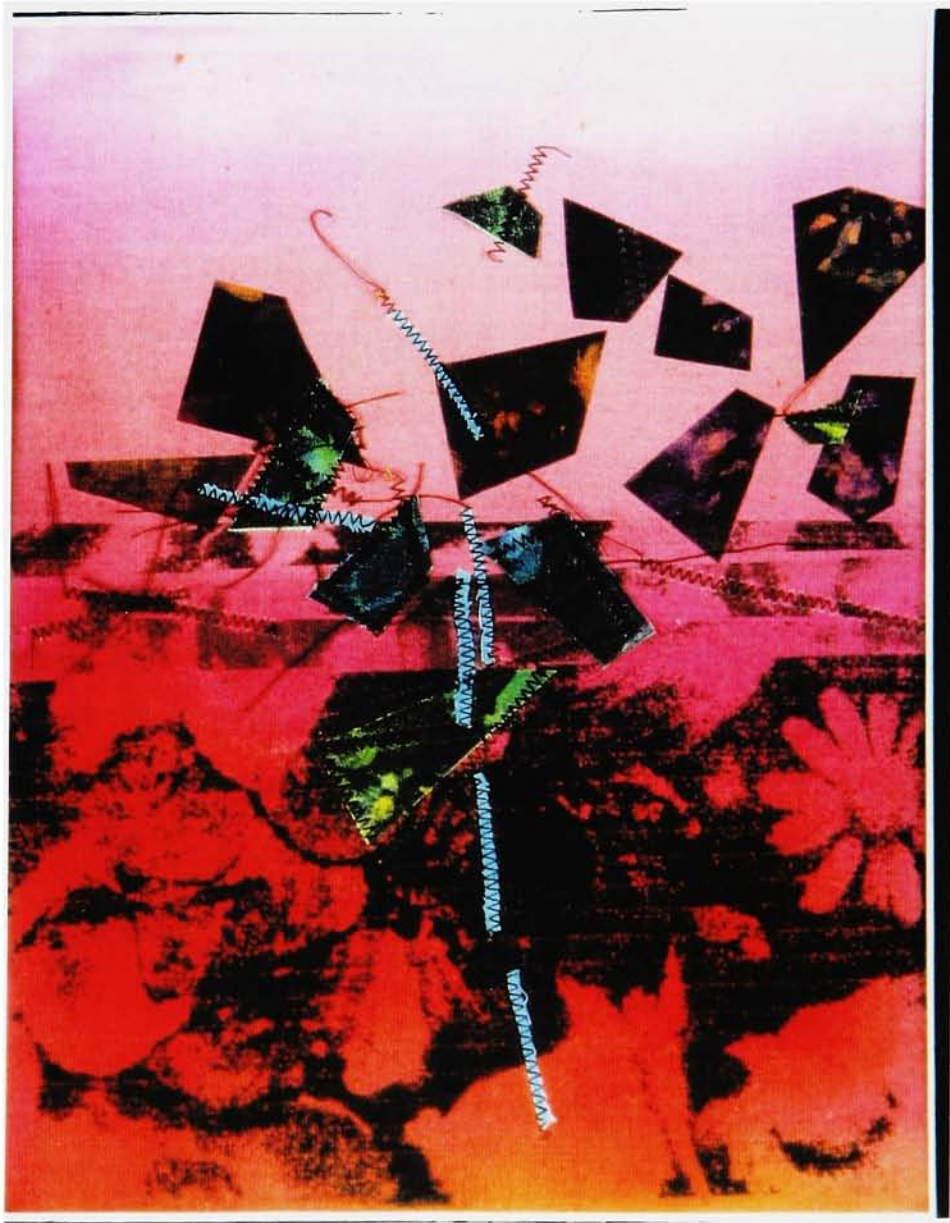
4. The rhythm of the winter season



5. The rhythm of a winter morning



6. the rhythm of a raining day



7. The rhythm of summer sunset

CONCLUSION

Because the period of exploration for this thesis was too short, I couldn't use all the techniques and materials skillfully enough. My work was not totally as complete as I would have intended, but I have been very excited by the results.

It is expected that I will overcome the limit of my expression and I feel that the possibilities are unlimited. Also I have been enlarging my direction and my future. I have just begun the process of researching and developing this future. This graduate study has given me the opportunity to create, explore and expand my aesthetic and working experience. I will continue my work when I return home. It has been a difficult challenge but a very positive one, and I wish to thank everyone for giving me this opportunity.

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